# California Energy Commission Application For Certification Pursuant To The 21 Day Emergency Permitting Process

#### 1.0 Project Description

The Applicant, Pegasus Power Partners, LLC, proposes to construct a simple cycle peaking electric generation facility consisting of four General Electric (GE) LM6000 Enhanced Sprint gas turbine engines. The project will be located on the grounds of the California Institution for Men (CIM) in the City of Chino, San Bernardino County, California

### 1.1 Project Owner/Operator (Name, Address, Phone)

Pegasus Power Partners, LLC c/o Delta Power Company, LLC 89 Headquarters Plaza North Tower, 14<sup>th</sup> Floor Morristown, NJ 07960 (973) 993-1855 (973) 326-1821 (fax)

#### 1.2 Overview of Power Plant and Linear Facilities

The project is a nominally rated 180 megawatt (MW) power plant that will utilize four natural gas-fired combustion turbine generators equipped with state-of-the-art air pollution control features. The project will utilize GE LM6000 aeroderivative combustion turbine-generators, which have been installed in hundreds of facilities throughout the world. The facility will be configured in a simple cycle mode.

A fogging/evaporation system will be used to increase efficiency and output. At a later date, an inlet air chilling system (ammonia refrigeration system and glycol heat exchange medium) will be added to further increase efficiency and output.

The lube oil systems will be cooled by fin-fan coolers that employ a glycol/water heat exchange medium. The generators will be air-cooled.

To reduce nitrogen oxide  $(NO_x)$  emissions from the project, a water injection system will initially be used, with a selective catalytic reduction (SCR) technology ultimately installed as well. Demineralized water will be injected into the combustors of the combustion turbines to help reduce  $NO_x$  to 25 ppm. This method is a reliable and proven method to reduce  $NO_x$  emissions. Demineralized water will also be used for intercooling of the combustion turbine compressors during power boosting.

The SCR will ultimately be located in the turbine exhaust. The system is considered a best available control technology (BACT) and is a reliable and proven technology to further reduce  $NO_x$  emissions to 5 ppm. The system works by injecting ammonia vapor (NH<sub>3</sub>) into the flue gases, which then pass through a catalyst material. The resulting chemical reaction reduces the  $NO_x$  to harmless nitrogen and water. The catalyst material will be of a precious metal (e.g., titanium-vanadium) or zeolite type, neither of which is considered a hazardous material.

An oxidation-reduction catalyst of a precious metal type (e.g., titanium-vanadium) will ultimately be installed to reduce CO levels to 6 ppm and volatile organic compounds (VOC) to 2 ppm. The catalyst is not considered a hazardous material. An emissions monitoring system will be provided to periodically confirm that the facility's emissions are within limits.

Aqueous ammonia will be delivered several times per month to the site via a tanker truck regulated by the California Department of Transportation (CalTrans). The ammonia will be stored onsite in an aboveground tank which will be housed inside a secondary concrete containment unit. The containment will be designed to retain a minimum of 110 percent of the storage tank volume. The ammonia storage tank will be designed for a pressure of 50 psig. In addition, polypropylene balls and netting will be used in the secondary containment area to reduce the exposed surface area in the event of a catastrophic tank failure.

An ammonia flow control system will be used to regulate the use of ammonia. Vaporization skids will be used to heat the ammonia and inject it into the SCR systems or an alternate arrangement of direct injection into the turbine exhaust may be used.

In addition to the primary oil containment measures of the combustion turbines, a secondary containment system (deck and curbs) will be used with each combustion turbine to hold any accidental releases of lube oil. The secondary containment will hold a minimum of 110 percent of the oil capacity of a combustion turbine.

Secondary containment will be provided around each oil-filled transformer and will be designed to contain a minimum of 110 percent of the oil capacity of the transformer. In addition, a secondary containment system will be provided around each gas compressor and will be designed to contain 110 percent of the lube oil capacity of each compressor. Also, secondary containment systems will be used with the diesel driven fire pump and associated diesel fuel oil tank (approximately 250 gallons) as well as miscellaneous pumps and compressors containing oil. Secondary containment areas subject to rain will employ sumps and portable pumps to remove rain water to the storm drainage system.

The project will cover an area of roughly 15 acres of land. Except for the approximately 110 foot stack for each of the four combustion turbines and miscellaneous vents, the project components are less than 50 feet in height.

The project will obtain potable water from the Inland Empire Utilities Agency (IEAU) in Rancho Cucamonga, California. IEAU currently supplies water to the OLS Energy - Chino cogeneration facility via an existing water line. The Applicant understands that the

OLS Energy - Chino facility may have sufficient water supply capacity to service its own needs as well as those of the project. The Applicant has contacted the IEAU to confirm that this is the case and has discussed with OLS Energy the possibility of tapping into the OLS Energy - Chino facility's water supply line.

The project will store water in an approximately 500,000 gallon aboveground service water tank that also serves as an alternate source for fire water. The project will consume about 260 gallons per minute (gpm) of water at peak usage.

Demineralized water will be provided from the nearby OLS Energy - Chino cogeneration facility and stored onsite in an aboveground tank. Alternatively, demineralized water will be provided via a portable ion exchange system used to treat water provided from the service water tank. Recharging of ion exchangers used to treat the service water will be done offsite.

Southern California Gas will provide the gas interconnection from its intrastate pipeline at a point located near the intersection of Central Avenue and Eucalyptus Avenue, about 1,000 feet west of the plant site. The route of the new gas pipeline is expected to be on CIM property along the right-of-way used for the service to the existing OLS Energy - Chino cogeneration facility. The gas pipeline will have a capacity of approximately 60 MMcfd.

The 230 kV transmission line will interconnect with Southern California Edison's 230 kV transmission system at a new switching station to be built adjacent to and interconnecting with the 230 kV Chino - Serrano line, approximately 1/2 mile south of the intersection of Eucalyptus Avenue and Magnolia Avenue.

Site storm drainage will be to the storm water system. Plant drains will be routed to a separation sump, with provisions for oil collection by an oil/water separator. Plant drains will be routed to either special tanks/sumps or to separate separation sumps, with provisions for oil collection by an oil/water separator. Any oil sludge will be properly disposed of at an appropriate waste disposal or recycling facility. Other plant liquid wastes collected in special tanks/sumps will be disposed of properly at a waste disposal or a recycling facility. Sewage will be discharged to the OLS Energy - Chino cogeneration facility. The plant is designed to have no other wastewater discharge.

The project will include a construction staging and maintenance area located immediately adjacent to the site. This staging area will be used during the construction phase of the project for parking vehicles and for the storage of materials and equipment.

# 1.3 Structure Dimensions (Size and Height), Plan, and Profile

The size of the facility is compact and consists of modular components. With the exception of combustion turbine exhaust stacks and miscellaneous vents, the facility components are less than 50 feet in height and will occupy approximately 15 acres. Refer to Attachment 1 for a plan view of the proposed facility and Attachment 2 for an elevation view.

# 1.4 Full Size Color Photo of the Site and Rendering of Proposed Facility if Available

Attachment 3 includes a site photograph.

#### 1.5 Maximum Foundation Depth, Cut, and Fill Quantities

Pending further geotechnical investigations, it is expected that the equipment will be supported on reinforced concrete foundation mats at grade. The mat foundations are expected to be roughly 3 feet thick for the major equipment (CTG, SCR, etc.), and somewhat thinner for the ancillary equipment. Foundations will be designed to support the weight of the equipment, plus operating loads, in addition to wind and seismic loads. The maximum depth of the foundations will not exceed 10 feet.

The project site will be graded to near flat within the equipment power island area. The site elevation will be determined based on the existing topography and a balanced cut and fill program.

#### 1.6 Conformance with California Building Code

The project will be designed and constructed in accordance with all applicable local, state and federal design standards commonly used in the design of peaking generation facilities. These standards will include specific criteria as they apply to the State of California and City of Chino, and will encompass seismic design standards as they pertain to the project site. The power plant is considered a nonessential facility, and as such, will be designed to be capable of operation following minor and most moderate earthquakes, but would likely sustain some damage following a major earthquake.

# 1.7 Proposed Operation (Hours Per Year)

The project is designed as a peaking unit. However, it will be permitted for up to 7,500 hours of operation per year to allow for maximum flexibility. Atmospheric emissions will be evaluated accordingly.

# 1.8 Expected On-line Date

The project is expected to be on-line and ready for commercial operation on September 30, 2001. It is anticipated that construction and commissioning will require approximately 4 months, provided that there are no delays in the gas and electric interconnection process. In the event of such delay, the initiation of commercial operation could be delayed.

# 1.9 Proposed Duration of Operation (Years)

It is anticipated that the facility's operating life will be 50 years.

#### 1.10 Identification of Transmission Interconnection Facilities

The project is located about 3,500 feet southwest of SCE's 230 kV Chino substation and also about 3,500 feet west of the existing 230 kV Chino - Serrano transmission line. The project will interconnect with the Chino - Serrano line at a point approximately 1/2 mile south of the intersection of Eucalyptus Avenue and Magnolia Avenue, via a new ring-bus switching station to be built adjacent to the existing line at that location.

#### 1.11 Transmission Interconnection Application

Attachment 4 includes transmission interconnection application materials.

# 1.12 "Downstream" Transmission Facilities (If Known)

Attachment 5 is a one-line diagram of the local SCE 230 kV system to which the new facility will be interconnected.

#### 1.13 Fuel Interconnection Facilities

Southern California Gas will provide the gas interconnection from its intrastate pipeline at a point located near the intersection of Central Avenue and Eucalyptus Avenue, roughly 1,000 feet west of the plant site. The route of the new gas pipeline is expected to be on CIM property along the right-of-way used for the service to the existing OLS Energy - Chino cogeneration facility. The gas pipeline will have a capacity of approximately 60 MMcfd.

### 1.14 Fuel Interconnection Application

Attachment 6 includes fuel interconnection correspondence.

# 1.15 Water Requirements and Treatment

The project will consume approximately 260 gpm water at peak usage to increase plant efficiency and reduce NO<sub>x</sub> emissions.

# 1.16 Water Interconnection Facilities (Supply/Discharge)

The project will obtain potable water from the IEAU in Rancho Cucamonga, California. IEAU currently supplies water to the OLS Energy - Chino cogeneration facility via an existing water line. The Applicant understands that the OLS Energy - Chino cogeneration facility may have sufficient water supply capacity to service its own needs as well as those of the project. The Applicant has contacted the IEAU to confirm that this is the case and has discussed with the OLS Energy - Chino cogeneration facility the possibility of tapping into its water supply line.

Site storm drainage will be to a storm water system. Plant drains will be routed to a separation sump, with provisions for oil collection by an oil/water separator. Any oil sludge will be properly disposed of at an appropriate waste disposal or recycling facility.

#### 1.17 Source and Quality of Water Supply

As described in Section 1.16, the project will obtain water from the IEUA, possibly via the OLS Energy - Chino cogeneration facility water supply line. Refer to Attachment 7 for water quality information.

### 1.18 Water Supply Agreement/Proof of Water Supply

The IEAU currently supplies water to the OLS Energy - Chino facility via an existing water line. The Applicant understands that the OLS Energy - Chino cogeneration facility may have sufficient water supply capacity to service its own needs as well as those of the project. The Applicant has contacted the IEAU to confirm that this is the case and has discussed with the OLS Energy - Chino cogeneration facility the possibility of tapping into its water supply line.

The Applicant expects to execute a Water Supply Agreement with IEAU and/or the OLS Energy - Chino cogeneration facility in time for interconnection of water supply services to support construction and operation.

### 2.0 Site Description

# 2.1 Site Address (Street, City, County)

The project site is adjacent to and west of the OLS Energy - Chino cogeneration facility. The address of the OLS Energy - Chino facility is 5601 Eucalyptus Avenue, Chino, San Bernardino County, CA 91708.

The project site is located on property owned by the State of California on a portion of Lot 2, Section 23, Township 2 South, Range 8 West, of Subdivision Rancho Santa Ana Del Chino in San Bernardino County. The site is located adjacent to the CIM facilities and the OLS Energy - Chino cogeneration facility and is bounded by Eucalyptus Avenue on the north. The western and eastern boundaries are roughly 1,000 feet and 2,300 feet east of Central Avenue, respectively. The site is approximately 380 feet wide, north to south.

The City of Chino will not assign an address to the facility until a structure is onsite.

#### 2.2 Assessor's Parcel Number

The County of San Bernardino has indicated that there is no tax assessor's parcel number for the project site since it is located on state property. However, the following property description was provided by the County of San Bernardino: a portion of Lot 2,

Section 23, Township 2 South, Range 8 West of Subdivision Rancho Santa Ana Del Chino in the County of San Bernardino, State of California, as described in Book 6, page 15 of Maps in the office of the recorder of San Bernardino County.

# 2.3 Names and Addresses of All Property Owners Within 500 Feet of the Project Site or Related Facilities

The following list includes the names and addresses of all property owners within 500 feet of the project site and linear facilities. An electronic mail merge format will be submitted to the CEC under separate cover:

- OLS Energy Chino, 5601 Eucalyptus, Chino, CA 91708.
- State of California, Department of General Services, 717 K Street, Suite 409, Sacramento, CA 95814-3406.
- TDN Land Co., 5211 Edison Ave., Chino, CA 91710.
- Larry Barrios, Jr. and Carmen Barrios, 14450 Central Avenue, Chino, CA 91710.
- American Eagle Wheel Corp., 5780 Soestern Court, Chino, CA 91710.
- Pico Property Investments, 4811 S. Eastern Avenue, Bell, CA 90201.
- City of Chino Hills, 2001 Grand Avenue, Chino Hills, CA 91709.

### 2.4 Existing Site Use

The eastern portion of the proposed plant site was formerly used as a plant nursery by the CIM but is now abandoned. An abandoned one story structure onsite will be removed. Small amounts of landscaping materials are still stored at this location. The western portion of the plant site is open field.

The 230 kV transmission line will interconnect with SCE's 230 kV transmission system at a new switching station to be built adjacent to and interconnecting with the 230 kV Chino - Serrano line, approximately 1/2 mile south of the intersection of Eucalyptus Avenue and Magnolia Avenue. The new transmission line will extend to Magnolia Avenue, where it will interconnect with an existing 230 kV line.

The water line will be located on the project site. The gas line will be located onsite and will extend to the west on CIM property along an existing dirt road (Eucalyptus Avenue). The gas line will tie into Southern California Gas's intrastate pipeline system at a point near the intersection of Central Avenue and Eucalyptus Avenue, approximately 1,000 feet west of the plant site.

### 2.5 Existing Site Characteristics (Paved, Graded, etc.)

The project site currently consists of an abandoned plant nursery and open space. Disturbances onsite are scattered and include a plowed field and areas where debris from human activities has been deposited.

### 2.6 Layout of Site (Including Plot Plan)

The project will be constructed within a 15 acre site which includes four combustion turbine generators, four SCR modules, four exhaust stacks, four modular control structures, and a facility substation which includes two step-up transformers and four generator circuit breakers. A new 230 kV transmission line, supported on tubular steel structures, will be constructed and will extend to the east and southeast, where it will interconnect with the existing SCE 230 kV Chino - Serrano line. Refer to Attachment 1 for a site arrangement drawing.

# 2.7 Zoning and General Plan Designations of Site and Linear Facilities

#### 2.7.1 Zoning Classification

The City of Chino has classified the project site in the OS (Open Space) Zone. The regulations of the OS Zone are set forth in Chapter 20.11 of the Municipal Code of the City of Chino.

#### 2.7.2 General Plan Designation

The Land Use Element of the City of Chino's General Plan designates the project site and surrounding areas (i.e., the area south of Edison Avenue and east of Central Avenue) as Open Space - Urban Reserve. Chapter IV, Section A 4, of the Land Use Element describes the Open Space - Urban Reserve designation as follows:

"The purpose of this designation is to hold an area for future urban development in the event of a change of use. In this case, the California Institution for Men has been designated as Open Space - Urban Reserve in the event that it should be recycled for urban use. At the time of such a change, a specific plan should be developed for the entire area outlining detailed land uses, circulation standards, and design standards."

Additional text in the Land Use Element provides guidance regarding the future specific planning that the Urban Reserve area would be subject to if and when it ever changes to a noninstitutional use. The specific plan to be adopted at that time would do the following:

Allocate land uses within the area allowing for no more than 8,000 residential units with accompanying commercial facilities, parks, and other public facilities.

- Establish precise design and development standards for all land uses which will serve to integrate such units into a consistent whole.
- Establish a precise circulation system including future roadway alignments and design standards.

#### 2.8 Ownership of Site (Name, Address, Phone)

State of California Department of General Services 717 K Street, Suite 409 Sacramento, CA 95814-3406

#### 2.9 Status of Site Control

The project is currently negotiating a lease agreement with the State of California Department of General Services.

#### 2.10 Equipment Laydown Area - Size and Location

The project will use approximately 2 acres near the project site for equipment laydown and may use administrative and warehousing areas located near the site. These areas have not yet been selected.

### 3.0 Construction Description

#### 3.1 Construction Schedule

It is anticipated that approximately 4 months will be required to achieve construction and commissioning of the first three units, provided that there are no delays in the gas and electric interconnection process.

# 3.2 Workforce Requirements (Peak, Average)

It is expected that the average number of construction craft personnel over the course of the project will range from of 80 to 90. The peak number of construction craft personnel will range from 100 to 120.

# 4.0 Power Purchase Contract (DWR, ISO, Other)

# 4.1 Status of Negotiations and Expected Signing Date

The Applicant is currently negotiating a power purchase agreement, which is expected to be executed in the near future.

#### 5.0 Air Emissions

#### **5.1 Nearest Monitoring Station (Location, Distance)**

The nearest air monitoring location is in Ontario, California at 1408 Francis Street. However, other monitoring locations which were also used to provide a more comprehensive background database included Pomona and Fontana.

### 5.2 Complete Self-Certification Air Permit Checklist

Refer to Attachment 8.

#### 5.3 Provision of a Complete Air Permit Application

The Permit to Construct Application for the project which was submitted to the South Coast Air Quality Management District (SCAQMD) on April 20 and revised on April 27, is provided under separate cover.

### 5.4 Status of Air Permit Application with Air District

As stated above, the Permit to Construct Application for the project has been submitted to the SCAQMD.

# 5.5 Status of Offsets and/or Mitigation Fees, As Required

Based on estimates detailed in the Permit to Construct Application submitted under separate cover, the project will be required to acquire the following offsets:

- NO<sub>x</sub>--Up to 960 lb/day.
- CO--Up to 1,445 lb/day.
- $SO_2$ --Up to 34 lb/day.
- $PM_{10}$ --Up to 331 lb/day.

The Applicant is currently working with several emissions offset brokers to obtain the required  $NO_x$  credits. Because of the relative scarcity of  $PM_{10}$  ERCs presently available for purchase within the SCAQMD, the needed quantity of ERCs for this pollutant will be obtained using one or more of the following strategies:

• Having brokers obtain the necessary  $PM_{10}$  credits.

- Having brokers obtain SO<sub>x</sub> ERCs to be used at the 2:1 ratio accepted by SCAQMD.
- Developing a mitigation project or projects with appropriate entities to create the required PM<sub>10</sub> ERCs.

In addition, the Applicant will investigate the possibility of purchasing credits to offset project emissions of all pollutants from the California Air Resources Board pursuant to Governor Davis' recent Executive Orders.

#### 6.0 Noise

#### 6.1 Local Noise Requirements

The City of Chino Noise Ordinance indicates that the exterior sound level at any residence must not exceed 55 dBA during daytime hours (7 a.m. to 10 p.m.) and 50 dBA during nighttime hours (10 p.m. to 7 a.m.). The ordinance also indicates that, in any area in which the existing ambient sound level exceeds the noise requirements stated above, the noise requirements will be increased to equal the existing ambient level.

The CIM staff have indicated the facility noise emission will be acceptable, provided the OSHA noise criteria are satisfied. The OSHA noise criteria are based on sound level and length of exposure to the sound. The OSHA noise criteria indicate that a sound level of 82 dBA is acceptable based on a 24 hour daily exposure.

# **6.2 Nearest Sensitive Receptor (Type, Distance)**

The nearest sensitive receptors are the CIM staff and inmates, the closest of which are housed in barracks roughly 300 feet south of the site. The nearest residential locations are approximately 1 mile southwest and northeast of the facility. The closest commercial use is located approximately 1 mile west of the site.

# 6.3 Project Noise Level at Nearest Property Line

The facility noise emissions are projected to be approximately 65 dBA along the south facility property boundary and 63 dBA at the barracks south of the site. The sound level at the nearest residence is projected to be 41 dBA. The projected sound levels will satisfy the noise criteria.

# 6.4 Proposed Mitigation (If Required)

For protection of the CIM staff and inmates, the Applicant will include extensive noise mitigation in the facility design. The combustion turbine equipment will be housed in acoustic enclosures; the turbine inlet and exhaust will be equipped with silencers; and a barrier wall will be installed along the south side of each of the southern combustion turbines.

#### 7.0 Hazardous Materials

#### 7.1 Type and Volume of Hazardous Materials Onsite

The only currently planned hazardous material required and stored onsite for the project will be aqueous ammonia. The storage volume and purpose of the aqueous ammonia is described below.

Aqueous ammonia or ammonium hydroxide (NH<sub>4</sub>OH) will be stored onsite in a 15,000 gallon tank built inside a secondary concrete containment unit designed for 110 percent of the tank capacity. Aqueous ammonia will be used for emission control, using an SCR unit installed in the exhaust of each combustion turbine. The SCR is an air pollution control system typically used for such applications.

SCR is a postcombustion flue gas control technology that removes  $NO_x$  from the flue gas after it has been generated in the combustion process. The SCR uses aqueous ammonia to react with  $NO_x$  in the exhaust gases and convert them into environmentally acceptable emissions. It is proposed that aqueous ammonia, at a concentration of about 19.5 percent, be used for the project. The onsite storage and handling of aqueous ammonia is regulated under the California Accidental Release Program (CaIARP) requirements (California Health and Safety Code (CH&SC) Section 2770.1).

In addition to the quantities contained in the gas turbines and ancillary equipment, the following would also be stored onsite:

- Lubrication oil: 500 gallons in several containers.
- Turbine oil: 150 gallons in several containers.
- Hydraulic oil: 100 gallons in several containers.

Other lesser quantities of greases, solvents, special chemicals, and other materials routinely used in power plant operations would also be stored onsite in quantities typically less than 25 gallons.

# 7.2 Storage Facilities and Containment

Refer to Section 7.1.

# 8.0 Biological Resources

# 8.1 Legally Protected Species and Their Habitat Onsite and Along Linear Facilities

The project site and associated linear facilities are located entirely in areas that have been previously cleared or otherwise severely disturbed to the point that natural plant

communities no longer exist on them. The east half of the plant site was historically a plant nursery and is occupied by a variety of non-native trees, shrubs, and herbaceous weeds. The west half of the plant site and linear facilities consists of cultivated fields or previously disturbed land that is now occupied by weedy, non-native vegetation. A Biological Assessment was prepared for the Pegasus Project by Black & Veatch in April 2001 and is included in Attachment 9. The assessment concludes that no sensitive biological resources occur at the site and none are expected to occur for lack of suitable habitat. In addition, the proposed project will have no effect on the movement of any type of terrestrial or aquatic wildlife.

# 8.2 Legally Protected Species and Their Habitat Adjacent to Site and Along Linear Facilities

The proposed transmission line and gas pipeline cross severely disturbed land that is either cultivated or occupied by plant communities dominated by herbaceous, non-native, weedy species. This, coupled with the urban character of the surrounding vicinity, provides no potential for the presence of protected wildlife or plants in the areas adjacent to the site and along linear facilities. No impacts to endangered, threatened, or rare species or their habitats are anticipated from the proposed project.

No protected or otherwise sensitive species were observed anywhere in the project vicinity; and this same area provides little, if any, potential foraging habitat even for common species. Therefore, the project is expected to have insignificant environmental effects on biological resources.

# 8.3 Designated Critical Habitat Onsite or Adjacent (Wetlands, Vernal Pools, Riparian Habitat, Preserves)

Since no vernal pools or other wetlands or riparian habitat occur on the project site, no impacts to such entities are expected.

# 8.4 Proposed Mitigation (If Required)

No mitigation is proposed since there are no apparent impacts to biological resources.

#### 9.0 Land Use

# 9.1 Local Land Use Restrictions (Height, Use, etc.)

Land use restrictions governing development within the OS Zone are set forth in Chapter 20.11 of the Municipal Code of the City of Chino. The following restrictions apply to the site.

#### 9.1.1 Use

Section 20.11.030 of the Chino Municipal Code establishes a matrix of land uses which are permitted by right or conditionally permitted. Although this matrix does not list a "power plant" use as a separate use category, it does list "Utility Stations and Equipment

Buildings" as a use which is conditionally permitted in the OS Zone. As a conditionally permitted use, the use is subject to the filing of a Special Conditional Use Permit in accordance with the provisions established in Section 20.03.070 of the Municipal Code. For uses which are not listed in the matrix, Section 20.11.030 B establishes authority in the City's Planning Commission to permit an unlisted use if the Commission makes a determination that the unlisted use is similar to other uses listed.

#### 9.1.2 Lot Area, Setbacks, Floor Area Ratio, and Building Height

The general Development Regulations for the OS Zone, which would be applicable to the site, are set forth in Table 20.11.2 of Section 20.11.050 A as follows:

- Minimum Lot Area--1 acre.
- Minimum Lot Width--100 feet.
- Minimum Lot Depth--100 feet.
- Minimum Landscape Coverage--No established standard.
- Minimum Building Setback:
  - From front property line--25 feet.
  - From rear property line--25 feet.
  - From interior side property line--25 feet.
  - From street side property line--25 feet.
- Minimum Separation Between Buildings or Structures--In accordance with the Uniform Building Code.
- Maximum Lot Coverage--No established standard.
- Floor Area Ratio (FAR)--No established standard.
- Maximum Building Height:
  - Stories--Two.
  - Feet--30.
- Parking (for Utility Station and Equipment Buildings)--As determined by a parking needs assessment.

Exceptions to the height limits set forth above are made in Section 20.11.050 B 1 for penthouses or roof structures housing equipment required to operate and maintain a building and towers, steeples, chimneys, antennae, or other similar structures, subject to approval by the City's Planning Commission.

#### 9.2 Use of Adjacent Parcels

The project is bounded on the north and west by vacant property, on the east by the OLS Energy - Chino cogeneration facility, and on the south by CIM barracks and facilities. Refer to Attachment 10 for a map of local land uses.

#### 9.3 Ownership of Adjacent Parcels - Site and Linears

Refer to Attachment 10.

### 9.4 Demographics of Census Tract (If Known)

The following demographic information is for the City of Chino, which recorded a total population of 67,168 in 2000 (California Department of Finance). Thirty percent of Chino's population is younger than the age of 18; 30.1 percent of the people are between 18 and 34; 29.8 percent are between 35 and 54; 4.7 percent are between 55 and 64; and 5.3 percent are over the age of 65 (City of Chino, Department of Economic Development, January 1999). The median Chino family income in 2001 was \$49,900 (HUD, January 2001), and roughly 7.36 percent of the total population was below the poverty level (1990 US Census). The racial percentages of Chino's total population are as follows:

Race	Percentage of Population
Hispanic	47.4
White	37.6
Black	7.6
Asian/Pacific Islander	5.0
Indian	0.3
Other	0.2
Two or More Races	1.9

Source: California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000 PL94-171.

#### 10.0 Public Services

# 10.1 Ability to Serve Letter from Fire District

Refer to Attachment 11.

#### 10.2 Nearest Fire Station

The nearest fire station is located about 4 miles from the project site at 15091 LaPalma Drive, Chino, California, 91710.

#### 11.0 Traffic and Transportation

# 11.1 Level of Service (LOS) Measurements on Surrounding Roads - A.M. and P.M. Peaks

Through negotiations with the State of California, the Applicant has arranged access to the site via the gate located at Central Avenue and Eucalyptus Avenue. Regional access to the project site is via SR 60, which runs east-west and is located north of the site, and SR 71, which runs diagonally northwest-southeast and is located west of the project site. Direct access to the site is provided by Grand/Edison Avenue, Central Avenue, and Eucalyptus. East of Central Avenue, Eucalyptus is used primarily as an access road to CIM and receives no public traffic.

It is anticipated that construction traffic will use these roadways to access the project site. As an alternative, construction traffic may also use Euclid Avenue (Hwy 83) south from SR 60 to Edison Avenue, west on Edison Avenue to Central Avenue, and then south on Central Avenue to Eucalyptus, where the entrance gate is located. All roadways listed above are designated truck routes, as shown in Attachment 12 (City of Chino, Public Works Department, Transportation Division). Traffic counts, LOS, and truck routes associated with the roadways mentioned above, as well as surrounding roadways, are provided in Attachment 12 of this application.

It is anticipated that additional security measures will be required at the access gate (Central Avenue and Eucalyptus Avenue) to meet the expedited project construction schedule. The Applicant has agreed to assume responsibility for additional costs associated with increased security demand at this entrance gate during the construction period.

Traffic impacts associated with project construction are not expected to be significant. Operation of the project will not result in any significant impacts on traffic.

# 11.2 Traffic Control Plan for Roads During Construction Period

In order to minimize impacts to traffic flow, the Applicant will develop and implement a standard traffic control plan consistent with the size and scope of the project's construction activities. Such safety measures may include the following:

- Using proper signs and traffic control measures in accordance with Caltrans and City requirements.
- Installing crossing structures to avoid obstructing roads.

- Coordinating construction activities with appropriate City and County departments if closures of major roads are necessary during pipeline construction.
- Coordinating crossing of state highways with Caltrans in accordance with Caltrans regulations and permit requirements.
- Scheduling of traffic lane or road closures during off-peak hours whenever possible.
- Limiting vehicular traffic to approved access roads, construction yards, and construction sites.
- Constructing offsite pipelines in accordance with applicable state and local encroachment permit requirements and covering trenches in roadways during nonwork hours.

In addition, the traffic control plan will address these potential mitigation measures:

- Establishment of construction work hours outside of the peak traffic periods to ensure that construction workforce traffic occurs during offpeak hours.
- Scheduling of the delivery of heavy equipment and building materials by truck during off-peak hours.

The Applicant will obtain the appropriate transportation-related permits prior to project construction. In addition, CIM security requirements will be adhered to during project construction. Costs for additional security during construction will be paid for by the Applicant.

# 11.3 Traffic Impact of Linear Facility Construction

Construction of the natural gas pipeline will occur along Eucalyptus Avenue, running west from the project site to Central Avenue. This stretch of Eucalyptus Avenue is used by the CIM and therefore receives no use from the public. No significant traffic impacts are anticipated from the construction of the natural gas pipeline.

From the plant, the transmission line will extend east and southeast on CIM property along a right-of-way to be designated in the site lease. The new line will extend to Magnolia Avenue, where it will interconnect with an existing 230 kV line. No significant impacts are anticipated as a result of transmission line construction activities.

#### 11.4 Equipment Transport Route

Access to the site will be provided via Eucalyptus Avenue off Central Avenue in accordance with CIM requirements. Costs for additional security needed during construction will be paid for by the Applicant.

No significant traffic impacts are anticipated from equipment deliveries to the site.

#### 11.5 Parking Requirements - Workforce and Equipment

Parking for construction personnel will be provided within the construction staging area located adjacent to the project site. Construction of the project will require the use and installation of heavy machinery and associated systems and structures. In addition to deliveries of heavy equipment, construction materials such as concrete, pipe, cables, and steel will be delivered to the site by truck. At this time, the types of vehicles and equipment to be used for project construction have not been finalized.

#### 12.0 Water Resources

#### 12.1 Wastewater Volume, Quality, Treatment

Site storm drainage will be to the storm water system. Plant drains will be routed to a separation sump, with provisions for oil collection by an oil/water separator. Any oil sludge will be properly disposed of at an appropriate industrial dumpsite or recycling facility. The plant is designed to have no other wastewater discharge.

# 12.2 Status of Permits for Wastewater Discharge or Draft Permit (WDR/NPDES)

Erosion and sediment controls and other Best Management Practices (BMPs) will be implemented for the construction, post-construction, and operation phases, in accordance with the California NPDES General Permit for Storm Water Discharge Associated with Construction Activity, California NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, and with other local laws and ordinances as applicable.

# 12.3 Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy

In conjunction with detailed design of the project, a detailed erosion and sediment control plan will be developed to ensure that the construction and operation of the facility will conform to regulatory requirements involving erosion and sedimentation control. The plan will include details such as contours and grading, sedimentation controls, area inlet sedimentation barriers and dams, road sections, storm drains and manholes, permanent and temporary roads, surfacing materials, construction entrances, etc. The detailed plan

will be contained primarily on civil drawings that will be made available to the applicable state and local agencies.

#### 12.4 Spill Prevention/Water Quality Protection Plans

In accordance with 40 CFR 112.1 (d) (2), the site does not have aboveground storage capacity for oil that exceeds 1,320 gallons, and no single container has a capacity in excess of 660 gallons; therefore, a Spill Prevention Control and Countermeasure Plan for the facility is not required.

The storage and handling of aqueous ammonia at the site will be covered under the California Accidental Release Program (CalARP). The CalARP will be completed and approved, as appropriate, prior to the introduction of the chemical onsite.

The total area of the site is approximately 15 acres. Therefore, a Storm Water Pollution Prevention Plan (SWPPP) for construction activities will be in place prior to the start of construction. The SWPPP will include a description of BMPs for storm water pollution prevention to be implemented at the site during the construction phase. These BMPs will include but not limited to culverts, berms, sandbags, and other acceptable procedures for the prevention of storm water pollution from onsite materials. The SWPPP will be submitted to the local Regional Water Quality Control Board (RWQCB) for approval.

The operating facility will require an SWPPP and a Storm Water Monitoring Plan. A Notice of Intent (NOI) will be submitted to the RWQCB before the start of industrial activities according to their requirements. This will be followed by the preparation of an SWPPP for the site. All chemicals/oils stored onsite will be in closed containers and will include secondary containment to prevent flow of chemicals and oils into the storm sewers.

#### 13.0 Cultural Resources

# 13.1 Map of Known Historic/Prehistoric Sites

To date, no cultural resources are known to be on lands to be affected by the proposed project; therefore, no map has been included. A cultural resources investigation of the affected lands is being conducted by Garcia and Associates (San Anselmo, CA), and the results will be provided to concerned parties upon completion of the study. Notification of the project was sent to appropriate agencies requesting comments on the project. Copies of these letters and responses received are included in Attachment 13.

# 13.2 Proposed Mitigation (If Required)

No mitigation is proposed since no cultural resources have been identified as being impacted by the project. In the unlikely event that previously unknown cultural resources are found through project activities, all work in that vicinity will stop until an assessment can be made of the materials by a qualified archaeologist. Should human remains be

encountered, work in the vicinity will likewise stop, and the San Bernardino County Coroner will be immediately notified. If the remains are determined to be Native American, the coroner will contact the Native American Heritage Commission.

#### 13.3 Notification of Native Americans

The Native American Heritage Commission (Sacramento, CA) was notified of the project on April 3, 2001. The Commission requested that 13 individuals/organizations be contacted regarding the potential for the presence of cultural resources. Contact letters and those responses received are included in Attachment 13.

#### 14.0 Paleontological Resources

#### 14.1 Identification of Paleontological Resources

The lands proposed for the project have been subjected to extensive natural and human-related surface disturbances for many years. Therefore, the potential for the occurrence of significant, intact paleontological resources appears low. However, Garcia and Associates (San Anselmo, CA) has been retained to conduct a survey of the project components to ensure that no significant paleontological resources would be affected by the project. Notification of the project was sent to appropriate agencies requesting comments on the project. Copies of these letters and responses received are included in Attachment 13.

# 14.2 Proposed Mitigation (If Required)

In the event of a discovery of previously unknown surface or subsurface paleontological resources before or during construction, the project Applicant will stop work in the immediate vicinity of the discovery and retain a qualified paleontologist to ensure that appropriate measures are taken to avoid and protect, or scientifically remove and curate the specimen.

#### 15.0 Visual Resources

# 15.1 Plan for Landscaping and Screening to Meet Local Requirements

The Applicant plans to use appropriate landscaping and screening measures to enhance the appearance of the project. Examples of such measures include the following:

- Use of architectural and landform elements to integrate the industrial facility into the environment.
- Use of appropriate tones and colors to give an interesting and pleasant architectural look, and give depth to the site.

- Use of trees, shrubs, and ground cover that have minimal water needs. A detailed Landscape Plan will be developed and made available to state and local agencies in conjunction with the detailed design of the facility.
- Incorporation of trees, shrubs, and ground cover as appropriate to screen views of the project and enhance its visual quality.
- Installation of backlighting of the sound wall.

# 15.2 Full Size Color Photo of the Site and Rendering of Proposed Facility If Available

Refer to Attachment 3.

## 16.0 Transmission System Engineering

# 16.1 Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electrical Code

The project will conform with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code.

#### 17.0 References

California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000 PL 94-171.

California Department of General Services, Land Use Analysis, CIM Site, October 1997.

City of Chino, Community Development Department, personal communication with Brian Klausner, Black & Veatch, April 11, 2001.

City of Chino, Economic Development Department, personal communication with Brian Klausner, Black & Veatch, April 2001.

City of Chino, Economic Development Department, The City of Chino Where Everything Grows, 1999.

City of Chino, Public Works Department, Transportation Division, CMP Roadways and Traffic Counts: FY 99-00, March 13, 2000.

City of Chino, Public Works Department, Transportation Division, FY 99-00, Traffic Volume Census, March 15, 2000.

City of Chino, Public Works Department, Transportation Division, San Bernardino County CMP Intersection Level of Service, July 6, 2000.

City of Chino, Public Works Department, Transportation Division, Truck Routes Effective September 1998, March 16, 2000.

Pegasus Power Partners, LLC, Black & Veatch Corporation, SCAQMD Air Permit Application for Authority to Construct, April 2001.

San Bernardino County, Tax Assessor's Office, personal communication with Brian Klausner, April 6 and April 24, 2001.